

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

What is claimed is:

1-16. (cancelled)

17. (currently amended) A method of providing Quality of Service (QoS) prioritization for wireless network stations in a network, said method comprising:  
establishing a priority polling list comprising an identifier for at  
least a first wireless network station for which  
communication priority is desired;  
polling said priority polling list to determine whether said at least a  
first wireless network station identified on said priority  
polling list is ready to communicate on said network;  
granting priority access to communicate over said network to said  
at least a first wireless network station, wherein said  
priority access gives said at least a first wireless network  
station priority over another wireless network station  
excluded from said priority polling list;

scheduling, wherein said scheduling compromises receiving  
priority requests from stations and adding stations to said  
priority polling list upon request;

~~The method of claim 16 further comprising a scheduler scheduling~~  
~~wherein said scheduler monitors scheduling compromises~~  
~~monitoring~~ bandwidth availability; ~~when bandwidth is~~  
~~available, said scheduler sends scheduling comprises~~  
~~sending~~ a priority change notice to a station to indicate  
bandwidth is available and, upon acknowledgement from  
said station, ~~increases~~ increasing a priority level of said  
station to provide higher bandwidth to said station, when  
bandwidth is available.

18. (currently amended) A method of providing Quality of Service (QoS)  
prioritization for at least one wireless network station in a network, said  
method comprising:
- providing a coordination function that controls access to a network  
comprising wireless network stations, said controlled  
access occurring during a contention-free period;
  - providing a polling list comprising identifiers for a first group of  
said wireless network stations in said network;

providing a priority polling list comprising identifiers for a second group of said wireless network stations in said network, said second group consisting of stations for which communication priority is desired; polling said wireless network stations with identifiers included in said priority polling list to determine whether said wireless network stations in said second group have information to communicate; and granting network communication access, through said coordination function, to said wireless network stations within said second group that have information to communicate.

19. (previously presented) The method of claim 18 wherein said coordination function is a Point Coordination Function (PCF).
20. (previously presented) The method of claim 18 wherein said coordination function controls access only during an intermittent contention-free period.
21. (currently amended) The method of claim 18 wherein stations on said polling list<sub>i</sub> but normally excluded from said priority polling list<sub>i</sub> are intermittently rotated into said priority polling list to prevent starvation.
22. (previously presented) The method of claim 18 wherein a multi-level priority hierarchy is established among stations within said priority polling list thereby granting more frequent access to higher priority stations.

23. (currently amended) A method of providing Quality of Service (QoS) prioritization for at least one wireless network station in a network, said method comprising:
- providing a coordination function that controls access to a network comprising wireless network stations;
  - designating multiple priority levels for stations within a group of wireless network stations in said network for which communication priority is desired;
  - providing a multi-level priority polling list comprising identifiers for said group of wireless network stations in said network for which communication priority is desired, wherein stations are ranked with differing priority levels and higher priority stations are designated by listing their station identifiers ~~included~~ in said priority polling list ~~to determine~~; determining whether said stations ~~in said second group on said~~ priority polling list have information to communicate;
  - granting network communication access, through said coordination function, to said stations ~~within said second group on said~~ priority polling list that have information to communicate;
  - measuring characteristics of packets transmitted by a station to determine station bandwidth; and

adjusting the number of occurrences of a station identifier in said  
priority polling list so that higher priority stations have  
higher bandwidth.

24. (currently amended) An apparatus for providing Quality of Service (QoS)  
prioritization for wireless network stations in a network, said apparatus  
comprising:

a priority polling list comprising an identifier for at least a first  
wireless network station for which communication priority  
is desired;

a polling unit for polling stations on said priority polling list to  
determine whether said at least a first wireless network  
station identified on said priority polling list is ready to  
communicate on said network; ~~and~~

a coordinator ~~coordination function~~ for granting priority access to  
communicate over said network to said at least a first  
wireless network station, wherein said priority access gives  
said at least a first wireless network station priority over  
another wireless network station excluded from said  
priority polling list;

a bandwidth monitor for monitoring bandwidth availability;

a scheduler for scheduling, wherein said scheduling comprises  
receiving priority requests from stations and adding stations  
to said priority polling list upon request;  
a priority manager for sending a priority change notice to a station  
to indicate bandwidth is available and, upon  
acknowledgement from said station, increasing a priority  
level of said station to provide higher bandwidth to said  
station, when bandwidth is available.